

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-022851**Date Inspected:** 23-Apr-2011**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name:	N/A	CWI Present:	Yes	No			
Inspected CWI report:	Yes	No	N/A	Rod Oven in Use:	Yes	No	N/A
Electrode to specification:	Yes	No	N/A	Weld Procedures Followed:	Yes	No	N/A
Qualified Welders:	Yes	No	N/A	Verified Joint Fit-up:	Yes	No	N/A
Approved Drawings:	Yes	No	N/A	Approved WPS:	Yes	No	N/A
				Delayed / Cancelled:	Yes	No	N/A
Bridge No:	34-0006	Component:	OBG Trial Assembly				

Summary of Items Observed:

On this date Caltrans OSM Quality Assurance (QA) Inspector Mr. S. Manjunath Math was present during the time noted above for observations relative to the work being performed.

This QA Inspector randomly observed the following work in progress:

Orthotropic Box Girder (OBG) at Trial Assembly Areas

BAY 11 – (Skid More Test)

This QA Inspector witnessed High Strength Bolt Testing for ASTM A325 Grade. Observed ZPMC QC Mr. Zhang Hai Jun (Bolting QC) performing bolts testing and ZPMC QC Inspector Mr. Lin Guang Guo (Testing Lab QC) generating report against the testing.

The testing of bolts was performed to determine

- 1.High Tension bolt capability (Proof Load).
- 2.Nut Rotation from Snug-Tight condition to Turn-of-Nut Pre-tensioning (Working Torque value at site).

Bolt assembly identified as ASTM A325 (High Strength Bolt), Bolt Assembly comprises of (a Bolt, a Nut and a Washer).

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Bolt testing was performed on a Unit: Skidmore-Wilhelm; Model: HT; Serial Number: 15866 (Calibration Expiration due date on April 29, 2011) and Torque Wrench identified as XO-326 and Torque Wrench with Dial gauge on it is identified as XO-2.

Three (3) bolt assemblies were tested per lot, after determining High Tension bolt capability (Proof Load) following Reports were generated by Mr. Ling Guang Guo.

Inspection Report # 56 for bolt size M20x80, RC Set# DHGM200056.

Inspection Report # 40 for bolt size M20x75, RC Set# DHGM200040.

Inspection Report # 55 for bolt size M20x75, RC Set# DHGM200055.

Inspection Report # 34 for bolt size M20x70, RC Set# DHGM200034.

Inspection Report # 41 for bolt size M20x80, RC Set# DHGM200041.

Inspection Report # 44 for bolt size M20x100, RC Set# DHGM200044.

Inspection Report # 43 for bolt size M20x95, RC Set# DHGM200043.

Inspection Report # 42 for bolt size M20x90, RC Set# DHGM200042.

Inspection Report # 31 for bolt size M20x65, RC Set# DHGM200031.

Five (5) bolt assemblies were tested per lot after determining Nut Rotation from Snug-Tight condition to Turn-of-Nut Pre-tensioning (Working Torque value at site) following Reports were generated by Mr. Zhang Hai Jun.

Inspection Report # 309 for bolt size M20x80, RC Set# DHGM200056, Torque value 273 N-m.

Inspection Report # 310 for bolt size M20x75, RC Set# DHGM200040, Torque value 287 N-m.

Inspection Report # 308 for bolt size M20x75, RC Set# DHGM200055, Torque value 240 N-m.

Inspection Report # 311 for bolt size M20x70, RC Set# DHGM200034, Torque value 267 N-m.

Inspection Report # 312 for bolt size M20x80, RC Set# DHGM200041, Torque value 263 N-m.

Inspection Report # 314 for bolt size M20x100, RC Set# DHGM200044, Torque value 277 N-m.

Inspection Report # 313 for bolt size M20x95, RC Set# DHGM200043, Torque value 280 N-m.

Inspection Report # 315 for bolt size M20x90, RC Set# DHGM200042, Torque value 287 N-m.

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Inspection Report # 316 for bolt size M20x65, RC Set# DHGM200031, Torque value 393 N-m.

Please reference the pictures attached for more comprehensive details.

The generated reports were submitted to the Lead Inspector Mr. Mark Miller for review and disposition.

Traveler Rails at Bay # 10

This QA Inspector performed Dimension Control Inspection on the Traveler Rails 31TR1-001, 31TR2-001 and 31TR3-001 for the following measurements and observed measured dimension in compliance contract document. Inspection was performed against the Inspection Notification # 008907 dated April 23, 2011 at Bay # 10.

Traveler Rails Thickness at typical section.

Traveler Rails Flange width at typical section.

Traveler Rails Depth at typical section.

Traveler Rails Flange curl at typical section.

Traveler Rails Traveler Rail length.

Traveler Rails Sweep.

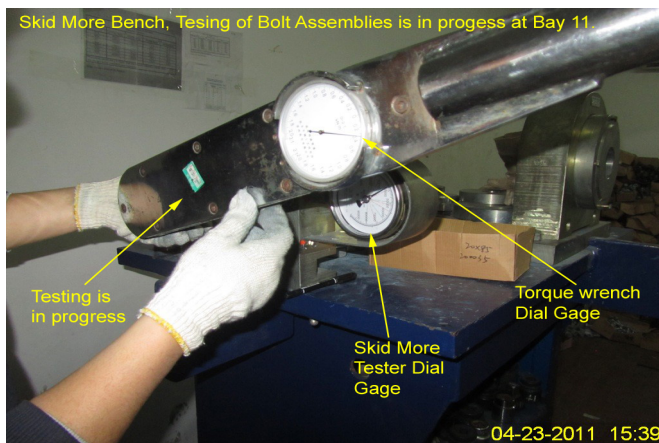
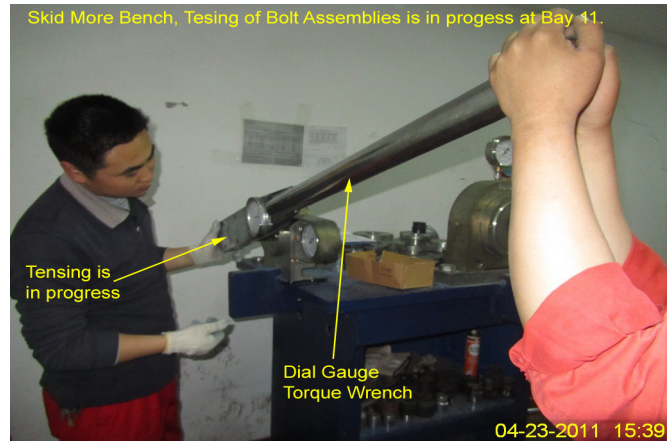
The measurements were recorded in the Dimension Control Plan (DCP) on a separate form and submitted to the Lead Inspector and Engineer for review and disposition. The result of the inspection was informed to ZPMC QC Mr. Sun Zi Wang, ABF QA Mr. Yang Yi Heng and Caltrans Lead Inspector Mr. Mark Miller.

Please reference the pictures attached for more comprehensive details.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

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Summary of Conversations:

No relevant conversations were reported on this date.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 15000422372, who represents the Office of Structural Materials for your project.

Inspected By: Math,Manjunath

Quality Assurance Inspector

Reviewed By: Miller,Mark

QA Reviewer